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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/560,347 | 12/12/2005 | Daisuke Yamada | 282073US2PCT | 6406 |

22850 7590 03/02/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

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| EXAMINER |
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HYEON, HAE M

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| ART UNIT | PAPER NUMBER |
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2839

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|--|-------------------|---------------|
| 3 MONTHS | 03/02/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/02/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/560,347

Applicant(s)

YAMADA ET AL.

Examiner

Hae M. Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 13-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/12/05 & 3/10/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, drawn to claims 1-12 in the reply filed on December 18, 2006 is acknowledged. The traversal is on the ground(s) that the examiner must examine the application if the search and examination of an entire application can be made without serious burden. This is not found persuasive because the present application contains more than one invention as stated in the Restrictions requirement made on November 17, 2006.

According to **35 U.S.C. 101**, Patents are not granted for all discoveries, but only for those, which are specifically provided for in 35 U.S.C. 101. This section requires that the invention be "new and useful" and that it fall within one of the five specified classes of invention, which are:

- 1. Process or method (which may be a process of making something or a process of using something)**
- 2. Machine or apparatus,**
- 3. Manufacture (article)**
- 4. Composition of matter**
- 5. An improvement of any of the above**

While claims 1-12 recite for an anisotropic conductive connector and claims 13-23 recite a process of making. Thus, the present application contains three different and distinct inventions that requires in search of three different classes as stated in the Restrictions requirement made on November 17, 2006. However, claim 24 recites a circuit inspection device, which is recited in claim 10. Therefore, claim 24 is rejoined with the Group I, drawn to claims 1-12.

The requirement is still deemed proper and is therefore made FINAL.

Specification

2. The disclosure is objected to because of the following informalities:
 - The first page of the present specification does not recites Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
 - Page 45, line 10, “conductive portion 10A” should be -- conductive film 10A --.Appropriate correction is required.
3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Claim 3 is objected to because of the following informalities: Claim 3, line 8, it seems that “the coupling portion” should be -- the short circuit portion -- because line 6 recites “the short circuit portion,” but claim 3 does not recite “the coupling portion” above line 8.
- Appropriate correction is required.

Double Patenting

5. Claims 5, 6 and 24 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1, 2 and 10. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 5, line 7 recites, “is **integrated** on” while claim 1, line 7 recites, “is **provided integrally** on” and claim 6, line 2 recites “a void” while claim 2, line 2 recites, “a through hole”. Claims 5 and 6 simply recite the same limitations as claims 1 and 2 in different wording. While claim 10 recites an anisotropic conductive connector device used with an inspection circuit device apparatus, claim 24 recites an inspection circuit device apparatus used with an anisotropic conductive connector device.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 5-12 and 24 are rejected under 35 U.S.C. 102(a) as being anticipated by Kokubo et al (US 6,969,622 B1).

Kokubo discloses an anisotropic conductive connector device comprising an anisotropic conductive film 20 having a plurality of conducting path forming portion 22 extended in a direction of a thickness and disposed at a constant pitch; a supporting body 10 for supporting a peripheral edge portion of the anisotropic conductive film 20; a sheet-like connector 40 having an insulating sheet 41 with a plurality of electrode structures 42 extended in a direction of a thickness; and a circuit device 50 with a circuit board 30 for an inspection, wherein the sheet-like

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connector 40 is provided integrally on the anisotropic conductive film 20 in a state in which each of the electrode structures 42 is positioned on each of the conducting path forming portions 22 of the anisotropic conductive film 20. The electrode structure 42 of the sheet-like connector 40 are disposed in a through hole formed on the anisotropic conductive film 20 and include a surface electrode portion 43, a back electrode portion 44 and a short circuit portion 45 connecting the surface electrode portion 43 and the back electrode portion 44.

8. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Weiss (US 7,059,874 B2).

Weiss discloses an anisotropic conductive connector device comprising an anisotropic conductive film 16 having a plurality of conducting path forming portions (lined up small circles); and a sheet-like connector having an insulating sheet 20 with a plurality of electrode structures 22, 24, 50 disposed in a through hole penetrating through the insulating sheet 20. The electrode structure includes a surface electrode portion 24; a back electrode portion 22 and a short circuit portion 50 extending in a direction of thickness of the insulating sheet 20 and integrally coupling the surface electrode portion 24 and the back electrode portion 22.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubo et al in view of Naoi (US 6,168,442 B1).

Claim 4 recites a through hole formed on the insulating sheet and a protruded portion on the anisotropic conductive film for coupling the anisotropic conductive film with the sheet-like connector.

While Kokubo does not disclose a through hole and a protruded portion for coupling two objects together, Naoi discloses a die 14 having a protruded portion 14a coupling with a through hole 30a formed on a plate 30 for securely fixing the plate 30 with the die 14.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the anisotropic conductive connector device taught by Kokubo such that it would have a through hole and a protruded portion as taught by Naoi because the through hole and the protruded portion would provide secure fixing between two objects. Furthermore, the use of the through hole and the protruded portion for fixing two objects are well known.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Application Publication No. 2005/0009386 A1 by Weiss et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M. Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hae M Hyeon
Primary Examiner
Art Unit 2839

hnh

hnh

Hae Moon Hyeon